

4. The glass etching composition as claimed in [any one of] claim[s] 1 [to 3], further comprising a [wherein said] surfactant[s are added].

5. The glass etching composition as claimed in [any one of] claim[s] 1 [to 4], wherein at least one of acetic acid, citric acid and phosphoric acid, and [said] a buffer thereof are added to adjust a pH of the glass etching composition.

6. The glass etching composition as claimed in [any one of] claim[s] 1 [to 5], further comprising a [wherein said] dye [is added] to color[ed] the composition.

7. The glass etching composition as claimed in [any one of] claim[s] 1 [to 6], wherein said fluoride is at least one compound selected from the group consisting of sodium fluoride, potassium fluoride, ammonium fluoride, sodium bifluoride, potassium bifluoride and ammonium bifluoride.

8. The glass etching composition as claimed in [any one of] claim[s] 1 [to 7], wherein said water is selected from the group consisting of tap water, ion exchange water, distilled water, ground water, spring water, filtrate water and a mixture of two or more thereof.

9. The glass etching composition as claimed in [any one of] claim[s] 1 [to 8], wherein said water-miscible solvent is at least one compound selected from glycerin, [and the group consisting of] a glycol, [such as methyl glycol, ethyl glycol, methylene glycol, ethylene glycol, propylene glycol, dimethylene glycol, diethylene glycol, dipropylene glycol, polymethylene glycol and polyethylene glycol, and the group consisting of] a glycol ether and an alcohol [such as ethylene glycol monomethyl ether, ethylene glycol monoethyl ether, diethylene glycol monomethyl ether, diethylene glycol monoethyl ether, diethylene glycol monoisopropyl ether, diethylene glycol monobutyl ether, dipropylene

glycol monoisopropyl ether and dipropylene glycol monobutyl ether, and the group consisting of a alcohol such as methanol, ethanol, propyl alcohol, isopropyl alcohol, butyl alcohol, isobutyl alcohol, 1,2-ethane diol, 1,2-propane diol, 1,3-propane diol, 1,4-butane diol, 1,2,3-propane triol, 1,2,6-hexane triol and sorbitol].

--10. The glass etching composition as claimed in claim 9, wherein said glycol is methyl glycol, ethyl glycol, methylene glycol, ethylene glycol, propylene glycol, dimethylene glycol, diethylene glycol, dipropylene glycol, polymethylene glycol or polyethylene glycol.--

--11. The glass etching composition as claimed in claim 9, wherein said glycol ether is ethylene glycol monomethyl ether, ethylene glycol monoethyl ether, diethylene glycol monomethyl ether, diethylene monoethyl ether, diethylene glycol monoisopropyl ether, diethylene glycol monobutyl ether, dipropylene glycol monomethyl ether, dipropylene glycol monoethyl ether, dipropylene glycol monoisopropyl ether or dipropylene glycol monobutyl ether.--

--12. The glass etching composition as claimed in claim 9, wherein said alcohol is methanol, ethanol, propyl alcohol, isopropyl alcohol, butyl alcohol, isobutyl alcohol, 1,2-ethane diol, 1,2-propane triol, 1,2,6-hexane triol or sorbitol.--

13[10]-The glass etching composition as claimed in [any one of] claim [1 to 9] 2, wherein said gelling agent is at least one compound selected from the group consisting of hydroxypropyl cellulose, hydroethyl cellulose, methyl cellulose, carboxymethyl cellulose, sodium carboxymethyl cellulose, sodium arginate, arabic gum, tragacanth gum, xanthum gum, bentonite, veegum, gelatin, bengl gelatin, polyacrylate, polyacryl amide, polyvinyl alcohol, polyvinyl pyrrolidone, polyvinyl acetate, an acrylate polymer, an isobutyl maleic

acid copolymer, an acrylic acid/methacrylic acid copolymer, an acrylic acid/maleic acid copolymer and [variants] an equivalent thereof.

14[11]. The glass etching composition as claimed [in any one of] claim[s 1 to 10] 4, wherein said surfactant is [at least one compound selected from the group consisting of] an anionic surfactant, [such as dodecylbenzene sodium sulfonate, an alkylbenzene sodium sulfonate, lignine calcium sulfonate, a perfluoroalkyl sulfonate, a perfluoroalkyl carboxylate and a perfluoroalkyl phosphate, and the group consisting of] an non-ionic surfactant, [such as polyoxyethylene acetyl ether, polyoxyethylene lauryl ether, polyoxyethylene oleil ether, polyoxyethylene stearyl ether, a polyoxyethylene alkyl ether, polyoxyethylene octylphenyl ether, polyoxyethylene nonylphenyl ether, sorbitan laurate, sorbitan palmitate, sorbitan oleate, sorbitan stearate, polyoxyethylene sorbitan monolaurate, polyoxyethylene sorbitan monopalmitate, polyoxyethylene sorbitan monooleate and polyoxyethylene sorbitan monostearate, and the group consisting of an ampholytic surfactant such as a dimethylalkyl betain, a alkyl glycine, amide betaine, imidazoline, a perfluoroalkylamino sulfonate, a perfluoroalkyl betaine, and the group consisting of a cationic surfactant such as octadecyldimethylbenzylammonium chloride, a alkyldimethylbenzylammonium chloride, tetradecyldimethylbenzylammonium chloride, dioleyldimethylammonium chloride, octadecyltrimethylammonium chloride, a alkyltrimethylammonium chloride, dodecyltrimethylammonium chloride, hexadecyltrimethylammonium chloride, a octadecylamine acetate, a hexadecylamine acetate, a perfluoroalkyltrimethylammonium salt and a perfluoroalkyl quaternary ammonium salt] an amphoteric surfactant or a cationic surfactant.

--15. The glass etching composition as claimed in claim 14, wherein said an anionic surfactant is dodecylbenzene sodium sulfonate, an alkylbenzene sodium sulfonate, lignin calcium sulfonate, a perfluoroalkyl sulfonate, a perfluoroalkyl carboxylate or a perfluoroalkyl phosphate.--

--16. The glass etching composition as claimed in claim 14, wherein said non-ionic surfactant is polyoxyethylene acetyl ether, polyoxyethylene lauryl ether, polyoxyethylene oleyl ether, polyoxyethylene stearyl ether, a polyoxyethylene alkyl ether, polyoxyethylene octylphenyl ether, polyoxyethylene nonylphenyl ether, sorbitan laurate, sorbitan palmitate, sorbitan oleate, sorbitan stearate, polyoxyethylene sorbitan monolaurate, polyoxyethylene sorbitan monopalmitate, polyoxyethylene sorbitan monooleate or polyoxyethylene sorbitan monostearate.--

--17. The glass etching composition as claimed in claim 14, wherein said amphoteric surfactant is a dimethylalkyl betain, a alkyl glycine, amide betaine, imidazoline, a perfluoroalkylamino sulfonate or a perfluoroalkyl betaine.--

--18. The glass etching composition as claimed in claim 14, wherein said cationic surfactant is octadecyldimethylbenzylammonium chloride, a alkyldimethyl benzylammonium chloride, tetradecyldimethylbenzylammonium chloride, dioleyldimethylammonium chloride, octadecyltrimethylammonium chloride, a alkyltrimethylammonium chloride, dodecyl-trimethylammonium chloride, hexadecyltrimethylammonium chloride, octadecylamine acetate, hexadecylamine acetate, a perfluoroalkyl-trimethylammonium salt and a perfluoroalkyl quaternary ammonium salt.--

19[12]. A frosting method for frosting a glass surface by using a [the] glass etching [liquid] composition, [for a glass surface] comprising the steps of:

- (a) cleaning a glass surface with a cleaning agent and wiping the glass dry,
- (b) masking a portion of [protecting] the glass surface [by masking on to a portion] where etching is not required,
- (c) etching [coating] the glass surface with the glass etching [liquid] composition as claimed in [any one of] claim[s] 1[, 3, 4, 5, 6, 7, 8, 9 and 11] by immersing, [or] spraying [to etch the glass surface] or coating,
- (d) washing [cleaning] the glass surface [again,] and removing the glass etching composition [and the masking] therefrom.

--20. The frosting method as claimed in claim 19, wherein the glass surface is coated by applying with a brush or squeezing from a tube.--

21[14]. The frosting method [for a glass surface] as claimed in claim [12 or 13] 19, wherein said cleaning agent is [selected from] water, a soap, a household cleanser or a household detergent.

22[15]. The frosting method [for a glass surface] as claimed in [any one of] claim[s] 12 to 14] 19, wherein said masking is made by an oily pen, an oily paint, a resin paint, an acrylic paint, a masking tape, a seal, or a silk screen printing method[, or other printing methods].